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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,265	12/14/2001	GopalaKrishna Reddy Kakivaya	MSFT-0736/183220.01	6084
41505 7590 08/27/2007 WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER BASEHOAR, ADAM L	
			ART UNIT 2178	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/017,265	<b>Applicant(s)</b> KAKIVAYA ET AL.	
	<b>Examiner</b> Adam L. Basehoar	<b>Art Unit</b> 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-27 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-27, and 29-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to the Amendment filed 06/07/07.
2. Claims 1-6, 8-10, 13, 15-21, 23-25, 29-35, and 37-39 remain rejected under 35 U.S.C. 102(a) as being anticipated by W3C, "Web Services Description Language (WSDL) 1.1", 03/15/01, pp. 1-51, <http://www.w3.org/TR/wsdl> (Hereafter W3C).
3. Claims 7, 12, 22, 27, 36, and 40 remain rejected under 35 U.S.C. 103(a) as being unpatentable over W3C, "Web Services Description Language (WSDL) 1.1", 03/15/01, pp. 1-51, <http://www.w3.org/TR/wsdl> (Hereafter W3C).
4. Claims 11, 26, and 41 remain rejected under 35 U.S.C. 103(a) as being unpatentable over W3C, "Web Services Description Language (WSDL) 1.1", 03/15/01, pp. 1-51, <http://www.w3.org/TR/wsdl> (Hereafter W3C) in view of Jeff Schneider, "Convergence of Peer and Web Services", 07/20/01, pp. 1-7, <http://www.openp2p.com/pub/a/p2p/2001/07/20/convergence.html> (Hereafter Schneider).
5. Claims 1-13, 15-27 and 29-41 are remain pending in the case. Claims 1, 16, and 30 are independent claims.

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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7. Claims 1-6, 8-10, 13, 15-21, 23-25, 29-35, and 37-39 are rejected under 35 U.S.C. 102(a) as being anticipated by W3C, "Web Services Description Language (WSDL) 1.1", 03/15/01, pp. 1-51, <http://www.w3.org/TR/wsdl> (Hereafter W3C).

**-In regard to substantially similar independent claims 1, 16, 30 and dependent claims 13, 15, and 29**, W3C teaches a method, computer readable medium, and device for providing interface description for a service of a device in a computing system, comprising:

creating a one to one mapping of each type in the device or object to an XML schema (Page 4: "Types- a container for data type definitions using some type of system (such as XSD)" & "WSDL recognizes the need for rich type systems for describing message formats, and supports the XML schema specification"; Page 5: e.g. Example 1); and

describing the one to one mapping with an extensible markup language (XML)-based Interface Description Language (IDL)(Page 1: Abstract; Pages 3-4: Introduction: "A WSDL document").

**-In regard to dependent claims 2, 17, and 31**, W3C teaches wherein the XML based IDL is Type Description Language (TDL)(Page 4: "Types"; Pages 13-14: "2.2 Types").

**-In regard to dependent claims 3, 18, and 32**, W3C teaches creating a one to one mapping from a programming construct (Page 5: Example 1: "<types>.....</types>") to an XML schema for describing the programming construct (Page 4: "WSDL recognizes the need for rich type systems for describing message formats, and supports the XML schema

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specification”; Page 9: “types, which provides data type definitions used to describe the messages exchanged”).

**-In regard to dependent claims 4, 19, and 33,** W3C teaches wherein the programming construct is one of pointer, class, array, subtype, enumeration, service reference, or bit field (Pages 13-14: “2.2 Types”).

**-In regard to dependent claims 5, 20, and 34,** W3C teaches creating a one to one mapping from a constant value of complex type to an XML schema for describing the constant value of complex type (Page 11: “<complexType>....</complexType>”).

**-In regard to dependent claims 6, 21, and 35,** W3C teaches creating a one to one mapping from at least properties, methods, events of the type system to an XML schema for describing the at least one of properties, methods, events (Page 5: Example 1: “<element name = “tickerSymbol” type= “string”/>”).

**-In regard to dependent claims 8, 23, and 37,** W3C teaches wherein the XML-based IDL as a wire format for message communications relating to the service between devices of the computing system (Page 12: “wire format is actually XML”).

**-In regard to dependent claims 9, 24, and 38**, W3C teaches creating a one to one mapping from the wire format to the message communications (Page 12: “wire format is actually XML).

**-In regard to dependent claims 10, 25, and 39**, W3C teaches wherein TDL enables a transfer of a service reference across an application boundary (Page 1: Abstract; Pages 3-4: Introduction).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7, 12, 22, 27, 36, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over W3C, “Web Services Description Language (WSDL) 1.1”, 03/15/01, pp. 1-51, <http://www.w3.org/TR/wsdl> (Hereafter W3C).

**-In regard to dependent claims 7, 22, and 36**, W3C does not specifically teach wherein TDL supports inheritance of programming constructs. It would have been obvious to one of ordinary skill in the art at the time of the invention for the TDL of W3C to have supported inheritance of programming constructs, because W3C taught a TDL utilizing XML Schema, which was notoriously well known in the art at the time of the invention to provide inheritance to the typed programming constructs.

**-In regard to dependent claims 12, 27, and 40,** W3C does not specifically teach wherein the XML-based IDL was extendable to map additional constructs of a richer type system to an XML schema. It would have been obvious to one of ordinary skill in the art at the time of the invention for the XML based TDL of W3C to be extendable to map additional constructs or a richer type, because W3C taught a TDL utilizing XML Schema, which was notoriously well known in the art at the time of the invention to provide the extension element which allowed the appending of additional elements to an existing simpleType or complexType element construct.

10. Claims 11, 26, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over W3C, "Web Services Description Language (WSDL) 1.1", 03/15/01, pp. 1-51, <http://www.w3.org/TR/wsdl> (Hereafter W3C) in view of Jeff Schneider, "Convergence of Peer and Web Services", 07/20/01, pp. 1-7, <http://www.openp2p.com/pub/a/p2p/2001/07/20/convergence.html> (Hereafter Schneider).

**-In regard to dependent claims 11, 26, and 41,** W3C teaches wherein the computing system was a web services distributed computing environment (Page 1: Abstract; Pages 3-4: Introduction"). W3C does not specifically teach wherein the computing environment was peer to peer. Schneider teaches the eventual convergence of web services computing environment and a peer to peer environment (Page 1: "it seems reasonable to predict the convergence of these paths"). It would have been obvious to one of ordinary skill in the art at the time of the invention for the web services of W3C to have implemented some of a peer to peer distributed computing environment, because Schneider teaches such a implementation would result in increased

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efficiency and reduced handling costs (Page 6: "increased efficiency and reduced handling costs")

***Response to Arguments***

11. Applicant's arguments filed 06/07/07 have been fully considered but they are not persuasive.

-In regard to independent claim 1, Applicant argues the W3C 1.1 reference does not disclose creating a one to one mapping of each type in the device or object to an XML Schema. The Examiner respectfully disagrees. W3C 1.1 clearly teaches wherein each type element defining a data type definition in the WSDL document was mapped to an XML Schema element, referenced from an associated XML Schema in the WSDL document, and used to define the types in a message. Therefore each type definition in the WSDL document was mapped to a corresponding element in the XML Schema that was used to define it. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. Features disclosed on pages 13-14) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant also argues that W3C 1.1 does not disclose describing the one to one mapping with an XML based Interface Description Language. The Examiner respectfully disagrees and believes that W3C 1.1 teaches an XML formatted Interface Description Language in that WSDL provides a programming language for defining the portTypes/interfaces and bindings that a given web service implemented. In response to



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applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. Features disclosed on pages 16-17) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

-In regard to dependent claim 2, Applicant argues wherein WSDL of the W3C 1.1 was not a Type Description Language. The Examiner respectfully disagrees. W3C 1.1 clearly teaches wherein WSDL is an XML formatted language (i.e. a data description language) for defining data type definitions for exchanging messages utilizing the XML Schema Definition (XSD). The XSD type system can be used to define the types in a message. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. Features disclosed on pages 18-20 of he Remarks section) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

-In regard to dependent claim 7, Applicant argues that the teaching of inheritance of programming constructs. The Examiner respectfully disagrees with the Applicant. While the W3C 1.1 reference does not explicitly teach inheritance of programming constructs, W3C 1.1. does teach utilizing the XML Schema Definition (XSD) for defining the programming constructs. As described above, the Examiner noted that it was notoriously well known in the art at the time of the invention that XML Schema provided inheritance to the typed programming constructs. Inheritance types for XML Schema included extension and restriction types, wherein

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the extension type provided the benefit of allowing a user to append additional elements after the content model of a base type and the restriction type provided the benefit of allowing a user to restrict the content model of the base type. The Examiner is unable to ascertain the answer to the Applicant's question regarding, why it took 5 years for the for the W3C (i.e. World Wide Web Consortium) to update to the specifically cited version of WSDL 2.0.

-In regard to dependent claim 8, Applicant argues that the W3C 1.1 reference teaches away from the claimed subject matter. The Examiner respectfully disagrees and notes that the W3C 1.1 reference teaches wherein the wire format could be XML but could also define the types in the message communications regardless if wire format wasn't in XML.

### *Conclusion*

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam L. Basehoar whose telephone number is (571)-272-4121. The examiner can normally be reached on M-F: 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALB

  
STEPHEN HONG  
SUPERVISORY PATENT EXAMINER